Approved For Release 2006/09/13 : CIA-RDP84B00049R001503710004-6

ATTACHMENT A

Key Conclusions of NIE 11-3/8-80
Soviet Capabilities for Strategic Nuclear Conflict Through 1990,
16 December 1980

Volume I, Summary

Strategic Air Defense

¶ 36 At present the massive Soviet air defense forces could perform well against aircraft at medium and high altitude, but would have little aggregate capability against targets at low altitudes. In the middle and late 1980s, Soviet air defenses will have the potential to inflict considerably higher attrition against US bombers of current types. By 1990 areas with adequate deployments of new systems could be defended against currently programed US cruise missiles. In addition, a forward defense with AWACS aircraft and interceptors could threaten some cruise missile carriers prior to launch. Nevertheless, because of numerical deficiencies, the Soviet capability to defend against an attack by large numbers of US cruise missiles will probably be limited over the next 10 years. Finally, collateral damage from a prior ballistic missile attack and the use of defense saturation, suppression, and electronic warfare tactics would degrade the overall effectiveness of Soviet air defenses. Thus, the actual performances of Soviet air defenses against combined attacks involving large numbers of US bombers, SRAMs, and cruise missiles will probably remain low during the period of this Estimate.

Volume II, The Estimate

Defense Against Low Altitude Bombers

¶ 62. We estimate that:

-- In the early 1980s, improved Soviet air defense systems will not be available in numbers large enough to markedly improve defense against bombers and cruise missiles at low altitudes.

-- In the middle and late 1980s, Soviet air defenses, if undamaged, will have the potential to inflict considerable higher attrition against US bombers of current types.

[redacted] 25X1

25X1 [redacted]

-- Throughout the 1980s, these defenses will probably have little or no effective capability against in-flight short-range attack missiles (SRAMs), although the bomber carrying them could be engaged.

Defense Against Cruise Missiles

¶ 63 The air defense systems projected to be deployed over the next 10 years would gradually increase the Soviets' capabilities to defend some areas against the currently programed US cruise missile. We believe, however, that the Soviets are not likely to solve all of the technical and operational difficulties posed by the cruise missile's small size, low altitudes, and large numbers. Also, we believe the Soviets will not, by 1990, have been able to deploy sufficient numbers of new systems to cover all the areas they would want to protect. Thus we believe that the Soviet capability to defend against a large cruise missile force will be limited throughout the next 10 years. An alternative view holds that the defense which is projected by 1990 would be formidable and could cause considerable attrition to the US cruise missile force if Soviet defenses are not effectively suppressed.*

Forward Defense Against Bombers and Cruise Missile Carriers

¶ 64 In addition to improving their defenses against penetrating bombers and cruise missiles it is possible that the Soviets will seek the capability to mount a forward defense against bombers and cruise missile carriers as far from Soviet borders as possible. By 1990, we project that 60 AWACS aircraft and about 1,050 interceptors would be available to form the mainstay of a forward defense along the overwater approach routes to the USSR at least 1,000 kilometers beyond Soviet borders, or even further if a long-range interceptor is deployed. Even though this would offer a nominal capability to intercept ALCM carriers at either high or low altitudes, US long-range ALCMs launched 1,000 kilometers from Soviet borders could reach most of the high-value targets in the USSR. Also, a forward defense could be avoided in some areas by an attacking force and the AWACS aircraft themselves could become vulnerable.

---

* The holder of this view is the Assistant Chief of Staff for Intelligence, Department of the Army.

Q 65 Although Soviet air defense capabilities are expected to improve in varying degrees against individual components of the US aerodynamic threat, several factors appear likely to weigh heavily against Soviet achievement of effective defense during the next 10 years:

-- Defensive systems optimally designed and deployed to defend against one type of penetrator--bombers, cruise missiles, or SRAMs--would have reduced effectiveness against the others.

-- Mutual support tactics by penetrating US bombers with SRAMs, electronic countermeasures (ECM), and cruise missiles could saturate and suppress Soviet air defenses.

-- A large-scale US ballistic missile attack against political, economic, and military targets would result in significant damage to air defense facilities, particularly airfields, even if air defense installations were not directly targeted. Also, air defense installations could be specifically targeted for defense suppression.

We cannot quantify the degree to which these factors would diminish the effectiveness of Soviet air defenses, but we believe that the actual performance of the defense against combined attacks involving large numbers of US bombers, SRAMs, and cruise missiles will remain limited throughout the period of the Estimate.

Key Conclusions of SNIE 4/2-81,
Soviet Potential to Respond to US Strategic Force Improvements and Foreign Reactions
6 October 1981

Q 39 A combined attack by cruise missiles and penetrating bombers armed with SRAMS would put far greater stress on Soviet air defenses than an attack by one force alone.

-- When new low-altitude-capable air defense systems are deployed in sizable numbers in the mid-1980s, penetration of Soviet air defenses by conventional bombers will be more difficult. The capabilities of the individual Soviet low altitude air defense systems that we have projected over the next 10 years are relatively insensitive to the differences in radar cross section and subsonic speed of conventional bombers.

[redacted] 25X1
25X1

However, differences in bomber characteristics that we have not assessed, such as avionics, ECM suite, and self-defense systems, may give the B-1 (with its higher low-altitude speed) a greater probability of penetration of Soviet air defenses. Air Force studies show that the planned characteristics of the B-1 would undoubtedly give it a greater probability of penetrating Soviet air defenses than currently operational bombers.

-- Current and future Soviet air defense systems on which we have evidence would have only limited capabilities against the US cruise missile, and probably could not be deployed in sufficient numbers in the 1980s to defend all the areas the Soviets probably would want to protect. Our judgment is that against a combined attack of penetrating bombers and cruise missiles the effectiveness of Soviet air defenses during the next 10 years will remain limited. Furthermore, we doubt that the Soviets will succeed even in the 1990s in solving all the air defense problems created by the very small radar cross sections of future aerodynamic vehicles. We have no basis, however, for estimating Soviet capabilities against US aircraft incorporating "stealth" technology.